Remote Sensing Applications Division (RSAD)

CDR Program Office

Weekly Report for Aug 8, 2014
Ed Kearns, Chief

Weekly Report – Aug 8, 2014

1 ISST – Optimum Interpolated Sea Surface Temperature
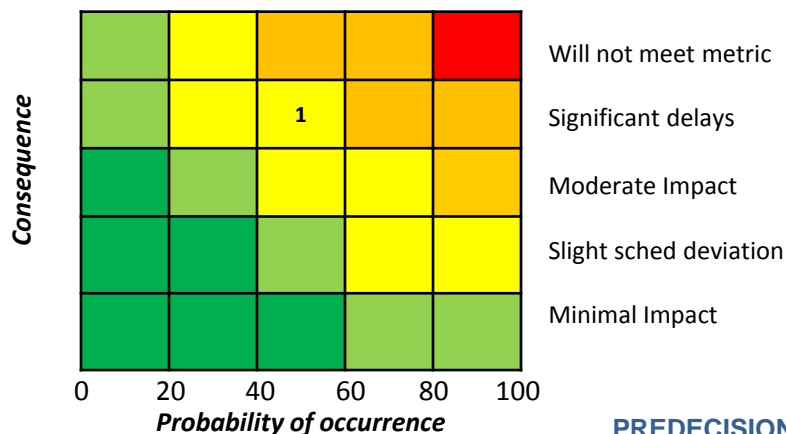
- **Performing dry runs for the System Acceptance Test (SAT).**
- **Created a complete golden data dataset. Existing set has gaps.**
- **Working with ITB for 3 tier environment, provided documentation.**
- Draft OISST Transition to Operations Project Plan is being reviewed (ITB and OISST team).
- Successfully completed 30 day parallel test.
- Comparing NCDC GTS with NCEP ship/buoy data for use. GCAD is resolving issues but requires new operational code.
- AVHRR data for the 15 day delay product is available from CLASS.
- Running test data and code on Rainband for parallel test.
- GSTWG discussing inputs and production of preliminary OISST.
- Created a SOP for operational OISST.
- Completed refactoring of each component.
- Conducted Technology Assessment Review.

Operations:

OISST Project	JUL	AUG	SEP	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	NOV
Phase 1																
Setup DEV env																
Verify DEV																
Complete software modifications																
Setup TEST env																
SAT Dry Runs																
SAT																

Tentative based on Plan Review

Risk Matrix

Consequence (y-axis):
Will not meet metric / Significant delays / Moderate Impact / Slight sched deviation / Minimal Impact

Probability of occurrence (x-axis): 0 20 40 60 80 100

(value "1" in Significant delays row, ~40-60 probability column)

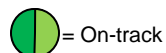## Risk and Mitigation

1 Time to progress through the three tier environment. ITB support is required.

2 Some operational users expect Near real-time access to the preliminary OISST. Need to

= On-track   = Potential management action required   = Management attention required
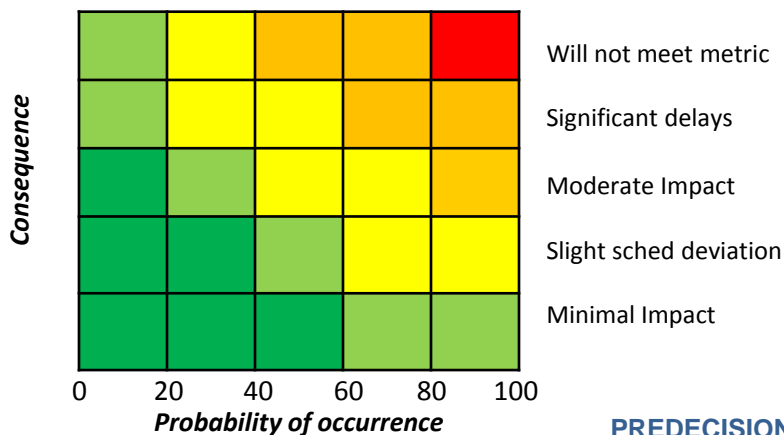
Weekly Report – August 8, 2014

1 **Operations Monitoring Tool development**
- **Working on database design.**
- Defined requirements for Phase 1 of the project.
- Phase 1 implements basic functionality .
- Additional datasets can be added in later phases.
- Updated the monitoring project plan.
- Monitoring of operational ingest.

Monitor Project	JUL	AUG	SEP	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	NOV
Phase 1																
Status View																
Dashboard																
Email Notification																
Phase II																

Risk Matrix

Consequence (y-axis, top to bottom): Will not meet metric, Significant delays, Moderate Impact, Slight sched deviation, Minimal Impact
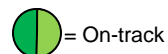
Probability of occurrence (x-axis): 0 20 40 60 80 100

Risk and Mitigation

PREDECISIONAL DRAFT INFORMATION

8/25/2014

= On-track   = Potential management action required   = Management attention required
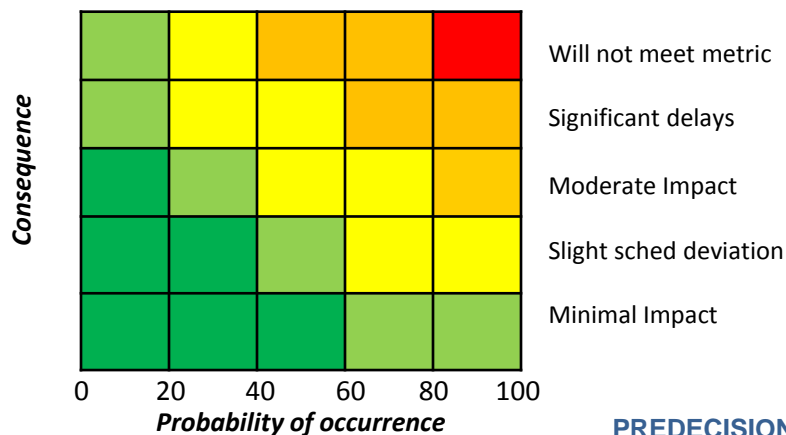
Weekly Report – August 8, 2014

① **Operations Monitoring Tool development**

- **Reviewing draft white paper to identify issues and establish scope.**
- **Discussed and will draft a Project Plan to scope this project.**
- Have identified parts of the algorithm that need to 'conditioned' during runtime and will affect reprocessing estimates.
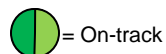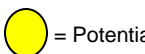- Discussed scope and goals of the project with CDRP scientist.

Risk Matrix

Consequence (vertical axis), rows top to bottom:
Will not meet metric
Significant delays
Moderate Impact
Slight sched deviation
Minimal Impact

Probability of occurrence (horizontal axis): 0 20 40 60 80 100

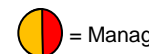## Risk and Mitigation

PREDECISIONAL DRAFT INFORMATION

= On-track   = Potential management action required   = Management attention required
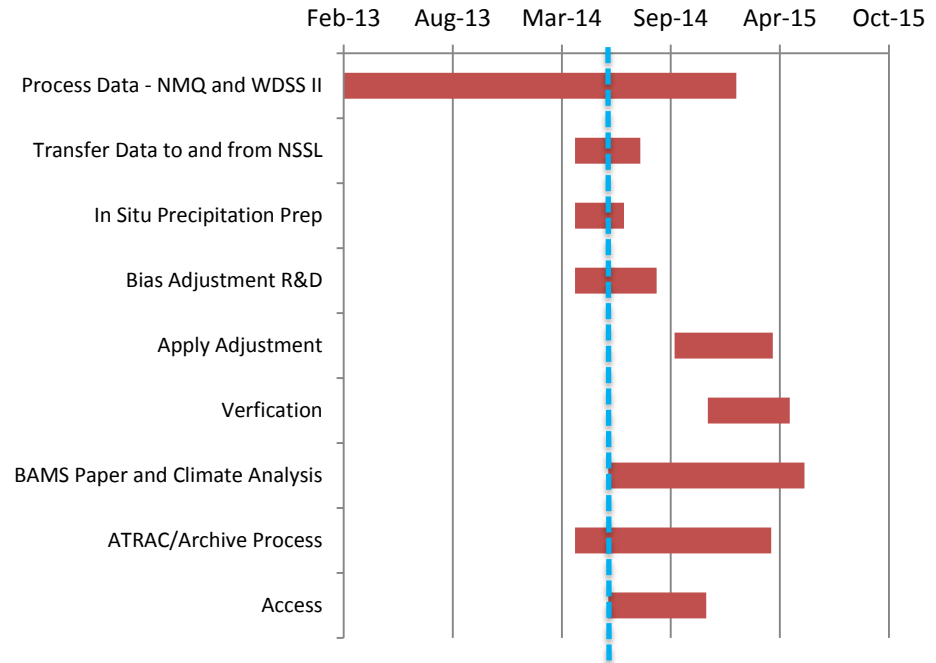
4

CDR Program Office
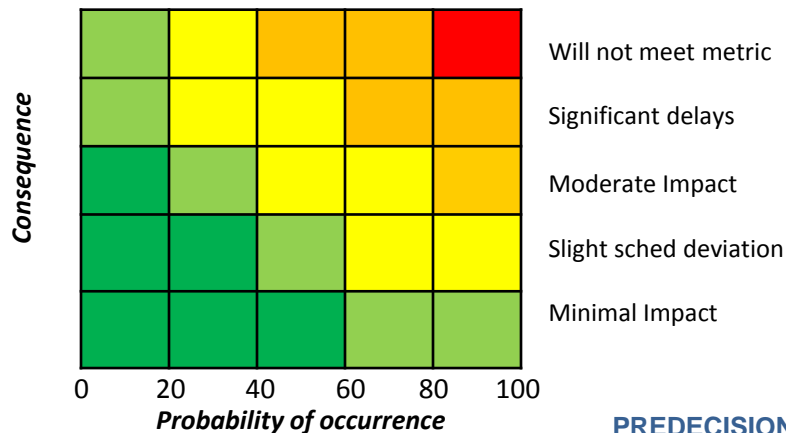## NOAA NEXRAD Reanalysis

Project Manager:
B. Nelson

Weekly Report

NNR – NOAA NEXRAD Reanalysis
- **Obtained COOP, HADS, and CRN data and process gauge –radar pairs for analysis.**
- **Testing phase of IDW scheme for multi-sensor estimation.**
- **Obtained all data to fill in full period of record (2000-2011) for radar only product and severe weather data from NSSL**
- **Loaded data to send back to NSSL**
- Present Project Overview to Stewardship Council
- Process 2007 (Severe Weather and Hydro)
- Obtain 2001 data from NCDC archive
- Develop Bias Adjustment Plan
- Transfer GCHN-Daily, and HADS data to NSSL
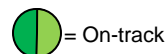- Present at Weather Radar Symposium
- Process 2006 2007 2009 20011 data

Feb-13 Aug-13 Mar-14 Sep-14 Apr-15 Oct-15

- Process Data - NMQ and WDSS II
- Transfer Data to and from NSSL
- In Situ Precipitation Prep
- Bias Adjustment R&D
- Apply Adjustment
- Verfication
- BAMS Paper and Climate Analysis
- ATRAC/Archive Process
- Access

Risk Matrix

Consequence (y-axis, top to bottom):
- Will not meet metric
- Significant delays
- Moderate Impact
- Slight sched deviation
- Minimal Impact

Probability of occurrence (x-axis): 0 20 40 60 80 100

Risk and Mitigation

No Risk at this time

PREDECISIONAL DRAFT INFORMATION

= On-track   = Potential management action required   = Management attention required

Weekly Status Update

- Ordering replacement data from EUMETSAT
- Sent beta data to users for feedback.
- Preparing ancillary calibration data for processing.
- Working on ISCCP Website for NCDC
- Preparing data for Beta users (preliminary output)
- Prepared space and scripts for ISCCP processing on CICS server.
- Received pre-processing software to QC input files (GEO/B1 & LEO/AVHRR)

Objectives

Produce ISCCP cloud products at NCDC following IOC R2O procedures. Plan for routine updates to follow.

Schedule

- Start Date   1983? 2003? 2013?
- Begin processing   September 2014
- End processing   December 2014
- QC & Analysis   Jan-Feb 2015
- Archive   March 2015
- Routine updates start June 2015
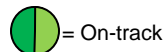
Risk Matrix
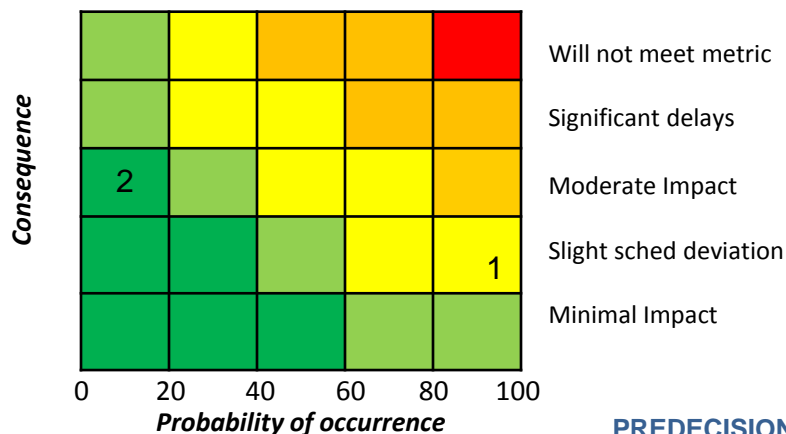
Risk and Mitigation

1. Delivery of software late and other delays.

2. CICS server space

8/25/2014

PREDECISIONAL DRAFT INFORMATION

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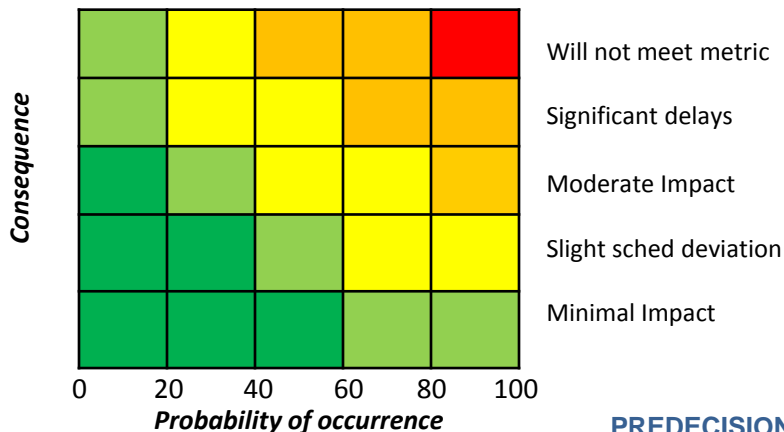
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Weekly Status Update

- Test data was converted to Obs4MIPS format.
- Planning meeting completed and schedule revised.
- Initial datasets selected for Obs4MIPS: OISST and OLR
- Lots of emails and investigations ongoing.
- Many CDRs can't work in Obs4MIPS: all FCDRs and all Mean Layer Temperatures aren't fit for this purpose.
- Kickoff meeting held 7/18
- Initial plans developed.

Obs4MIPS using CDRs (Project Manager: Hilawe Semunegus)	Start Date:		July 15, 2014	
NOAA's National Climatic Data Center				
Task (team member)	Start Date	End Date	Duration (days)	Percent Complete
1.1 Present project plan and time commitment to team members (all)	2014-07-15	2014-07-31	17	100%
1.2 Select 3 CDRs for Obs4MIPS conversion (all)	2014-07-15	2014-07-31	17	50%
1.3 Assess uncertainty estimates for selected CDRs based on CATBDs (J. Matthews)	2014-07-15	2014-07-31	17	0%
1.4 Assess time commitment for writing a "Technical Note Template" (SMEs): https://www.earthsystemcog.org/site_media/projects/obs4mips/Obs4MIPsTechnicalNoteGuidancev3.pdf	2014-07-15	2014-07-31	17	0%
1.5 Determine methodology for temporal and spatial upscaling/downscaling/averaging (SMEs and Jim Biard)	2014-07-15	2014-08-14	31	0%
2.0 Analysis (Sampling and validation)	2014-08-15	2014-11-14	92	0%
2.1 Create a sample monthly netCDF file for each Obs4MIPS-compliant CDR (Biard and SME)	2014-08-15	2014-09-14	31	0%
2.2 Independently compare sample output for scientific validation (SMEs and Biard)	2014-09-15	2014-10-14	30	0%
2.3 Validate that all metadata compliances are passed for sample files: CF, Obs4MIPS CMIP5 and CDR Metadata standards (Biard)	2014-10-15	2014-11-14	31	0%
3.0 Implementation (Code and documents)	2014-11-15	2015-02-28	106	0%
3.1 Produce Obs4MIPS CDRs for entire period of record (Biard and SMEs)	2014-11-15	2014-12-31	47	0%
3.2 Submit obs4MIPS Data Set Proposal Form (SMEs)	2015-01-01	2015-01-14	14	0%
3.3 Write Technical Note for each CDR (SMEs)	2015-01-01	2015-02-28	59	0%
4.0 Testing	2015-03-01	2015-04-30	61	0%
4.1 Test data scientifically (SMEs and Programmer)	2015-03-01	2015-03-31	31	0%
4.2 Test for monthly production (regular updates) of CDRs (within 10 days of succeeding month)	2015-03-15	2015-04-30	47	0%
5.0 Deployment (Archive)	2015-04-15	2015-10-31	200	0%
5.1 Complete Archive Request Form or ATRAC (SMEs, PM and Archive)	2015-04-15	2015-04-29	15	0%
5.2 Complete all Archive requirements (SMEs, PM and Archive)	2015-05-01	2015-07-31	92	0%
5.3 Serve CDRs via GFDL or NCDC ESG node (NOMADS-DAAB)	2015-08-01	2015-08-31	31	0%
5.4 UESB Product Briefing (SMEs)	2015-09-01	2015-09-15	15	0%
5.5 Add Obs4MIPS project to CDRP website				

Risk Matrix

Consequence (y-axis), *Probability of occurrence* (x-axis): 0, 20, 40, 60, 80, 100

Will not meet metric
Significant delays
Moderate Impact
Slight sched deviation
Minimal Impact

Risk and Mitigation

TBD

= On-track   = Potential management action required   = Management attention required

8/25/2014

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UW HIRS Processing @ NCDC

Weekly Status Update

- Waiting for final code delivery from Wisconsin.
- Preparing plan for processing on CICS server.
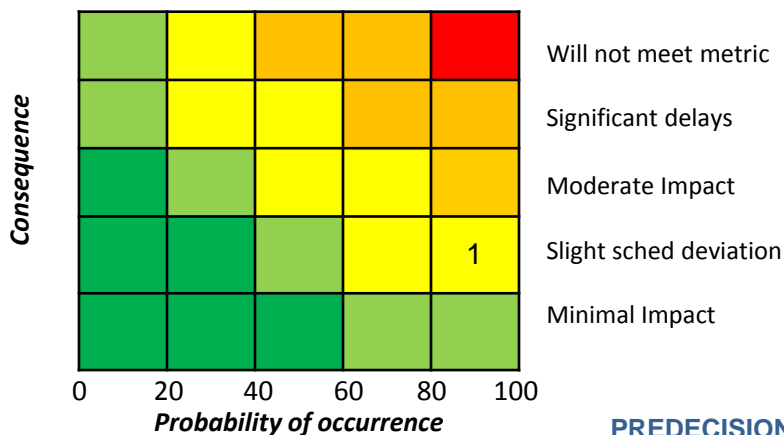- Working on finding space for the 10TB of input data (pixel level cloud data).

Objectives

Produce global total precipitable water and cloud top pressure estimates from HIRS data using the UW algorithm (P. Menzel).

Schedule

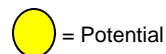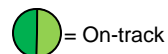- Start Date   TBD
- End Date   TBD

Risk Matrix

Consequence

Will not meet metric
Significant delays
Moderate Impact
Slight sched deviation
Minimal Impact

0   20   40   60   80   100
Probability of occurrence

Risk and Mitigation

1. Programmer was assigned to another task. Impact: Schedule may slip.

PREDECISIONAL DRAFT INFORMATION

= On-track   = Potential management action required   = Management attention required

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Albedo of the Americas

Weekly Status Update

- No change.
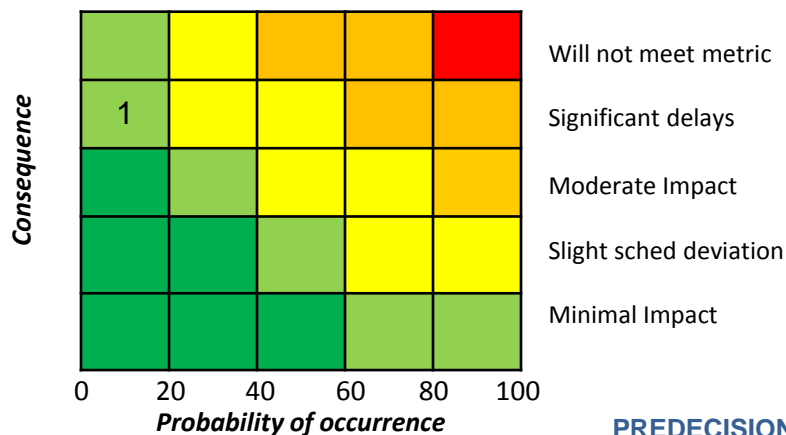- Loaned 42 TB of disk space allocation to ISCCP Project

Objectives

Produce a daily land surface albedo product over North and South America from GOES-GVAR observations for 1995-2014.

Schedule

- Start Date   January 2015
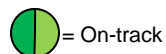- End Date   June 2016

Risk Matrix

Consequence (y-axis, top to bottom):
- Will not meet metric
- Significant delays
- Moderate Impact
- Slight sched deviation
- Minimal Impact

Probability of occurrence (x-axis): 0 20 40 60 80 100

Risk and Mitigation

1. Loaned disk space is not returned
   * Could cause delays. Unlikely since more disk space is planned.

= On-track   = Potential management action required   = Management attention required

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